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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/673,898

09/29/2003

Adam Weisz-Margulescu

18099 (AT 20958-60)

1982

7590

10/05/2005

Joseph Tessari
Tyco Electronics Corporation
Suite 140
4550 New Linden Hill Road
Wilmington, DE 19808

EXAMINER

NINO, ADOLFO

ART UNIT

PAPER NUMBER

2831

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/673,898

Applicant(s)

WEISZ-MARGULESCU ET AL.

Examiner

Adolfo Nino

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/29/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 9/29/05 is being considered by the examiner.

Specification

The disclosure is objected to because of the following informalities:

Page 5, paragraph [0026], line 4, "28" should be ----48----.

Page 7, paragraph [0033], line 9, "44" should be ----42----.

Appropriate correction is required.

Claim Objections

Claims 4, 14 and 19 are objected to because of the following informalities:

Claims 4 and 14, line 2, "processable" is misspelled.

Claim 19, line 5, "encapsulated" is misspelled.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 7, 8, 10-13, 15, 17, 19, 20 and 22-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Groenewegen (US 4,694,119).

Regarding claim 1 (original), Groenewegen discloses an electronic package (10) comprising: a circuit board (24); a capsule layer (22) encasing said circuit board (24) and in intimate contact therewith (fig. 1), thereby forming a sealed immersible electronic module (fig. 1); and a housing (12) receiving said electronic module and forming a protective shell around said electronic module (fig. 1).

Regarding claim 2 (original), Groenewegen discloses an electronic package (10) in accordance with claim 1, wherein said circuit board (24) includes at least one sensor (24, 26) coupled thereto.

Regarding claim 3 (original), Groenewegen discloses an electronic package (10) in accordance with claim 2, wherein said sensor (24, 26) is a hall effect sensor (col. 4, lines 35-42).

Regarding claim 5 (currently amended), Groenewegen discloses an electronic package (10) in accordance with claim 1, wherein said housing (12) comprises a longitudinal axis (fig. 1) and an elongated opening (not marked, but it would be the opening between housing 12 and section holding flanges 14 as seen in fig. 1) extending transverse to said longitudinal axis for adjusting a position of said housing. **Note** that it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed (i.e. "for adjusting a position of said housing") does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Regarding claim 7 (currently amended), Groenewegen discloses an electronic package (10) in accordance with claim 1, wherein said housing (12) comprises at least one indicator bar (not marked, but it would be the section sticking out of housing 12, holding flanges 14 as seen in fig. 1).

Regarding claim 8 (currently amended), Groenewegen discloses an electronic package (10) in accordance with claim 1, wherein one of said capsule layer (22) and said housing (12) comprises a latch (38) configured to engage the other of said capsule layer and said housing (fig. 1).

Regarding claim 10 (currently amended), Groenewegen discloses an electronic package (10) comprising: an electronic assembly (24) overmolded with a capsule layer (22), said electronic assembly (24) configured to output a signal in response to a condition of a monitored object (fig. 1); a housing (12) having a bore (16) therein configured to receive said overmolded electronic assembly (22); and one of said capsule layer (22) and said housing (12) comprising a latch (38) configured to engage the other of said capsule layer and said housing (fig. 1).

Regarding claim 11 (currently amended), Groenewegen discloses an electronic package (10) in accordance with claim 10 wherein said housing (12) comprises a longitudinal axis (fig. 1) and a positioning aperture (16) extending transversely to said longitudinal axis (fig. 1).

Regarding claim 12 (currently amended), Groenewegen discloses an electronic package (10) in accordance with claim 10 wherein said electronic assembly (24) includes at least one sensor (26).

Regarding claim 13 (currently amended), Groenewegen discloses an electronic package (10) in accordance with claim 12 wherein said sensor (26) is a hall effect sensor (col. 4, lines 35-42).

Regarding claim 15 (currently amended), Groenewegen discloses an electronic package (10) in accordance with claim 10 wherein said housing (12) comprises a longitudinal axis (fig. 1), and an elongated positioning opening (not marked, but it would be the opening between housing 12 and section holding flanges 14 as seen in fig. 1) extending transverse to said longitudinal axis (fig. 1).

Regarding claim 17 (currently amended), Groenewegen discloses an electronic package (10) in accordance with claim 10 further comprising at least one indicator bar (56) coupled to said housing (12) to visually indicate the condition of the monitored object. **Note** that it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed (i.e. "to visually indicate the condition of the monitored object") does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Regarding claim 19 (currently amended), Groenewegen discloses a method of packaging an electronic assembly (24) subject to a severe operating environment, said method comprising: encapsulating the electronic assembly (24) to form a sealed immersible electronic module (22); fitting the encapsulated electronic assembly (24) into a housing shell (12); and securing the encapsulated module (24) to the housing shell (12; fig. 1).

Regarding claim 20 (currently amended), Groenewegen discloses a method in accordance with claim 19 wherein said encapsulating the electronic assembly (fig. 1) comprises overmolding the electronic assembly (fig. 1).

Regarding claim 22 (currently amended), Groenewegen discloses a method in accordance with claim 19 wherein fitting the encapsulated module to the housing shell (fig. 1) comprises inserting the encapsulated module into a thixo-molded housing (fig. 1).

Regarding claim 23 (currently amended), Groenewegen discloses a method in accordance with claim 19 wherein fitting the encapsulated module to the housing shell (fig. 1) comprises inserting an end of the encapsulated module into an end of the housing shell, and sliding the encapsulated module into the housing (fig. 1).

Regarding claim 24 (currently amended), Groenewegen discloses a method in accordance with claim 19 wherein one of the encapsulated module (22) and the housing shell (12) includes a latch member (38) formed therein, said step of securing the encapsulated module (22) to the housing shell (12) comprising engaging the latch member (38) to the other of the encapsulated module and the housing shell (fig. 1).

Regarding claim 25 (currently amended), Groenewegen discloses a method in accordance with claim 19 wherein the electronic assembly (24) includes a cable (30), said step of encapsulating the electronic assembly (24) to form an electronic module (22) comprising overmolding the electronic assembly (24) and a portion of the cable (fig. 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 4, 6, 14, 16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Groenewegen (US 4,694,119) in view of Little et al. (US 6,920,050 B2).

Regarding claim 4 (currently amended), Groenewegen discloses an electronic package (10) in accordance with claim 1, except for said capsule layer (10) comprising a melt processible rubber. Little et al. teach that it is known to provide enclosures comprising a rubber as set forth at column 1, lines 41-43. It would have been obvious

Art Unit: 2831

to one having ordinary skill in the art at the time the invention was made to have made Groenewegen's capsule layer comprising of a melt processible rubber, as taught by Little et al. in order to avoid shorting. Moreover, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have made Groenewegen's capsule layer comprising of a melt processible rubber, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claim 6 (currently amended), Groenewegen discloses an electronic package (10) in accordance with claim 1, except for said housing (12) comprising a mounting stud. Little et al. teach that it is known to provide an enclosures comprising a mounting stud as set forth at column 2, lines 39-40. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made Groenewegen's housing comprising a mounting stud, as taught by Little et al. in order to have an additional mounting option.

Regarding claim 14 (currently amended), Groenewegen discloses an electronic package (10) in accordance with claim 10, except for wherein said capsule layer comprising a melt processible rubber. Little et al. teach that it is known to provide enclosures comprising a rubber as set forth at column 1, lines 41-43. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made Groenewegen's capsule layer comprising of a melt processible rubber, as taught by Little et al. in order to avoid shorting. Moreover, it would have been obvious

Art Unit: 2831

to one having ordinary skill in the art at the time the invention was made to have made Groenewegen's capsule layer comprising of a melt processible rubber, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claim 16 (currently amended), Groenewegen discloses an electronic package (10) in accordance with claim 10, except for wherein said housing comprises a mounting stud. Little et al. teach that it is known to provide an enclosures comprising a mounting stud as set forth at column 2, lines 39-40. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made Groenewegen's housing comprising a mounting stud, as taught by Little et al. in order to have an additional mounting option.

Regarding claim 21 (currently amended), Groenewegen discloses a method in accordance with claim 20, except for wherein said overmolding the electronic assembly (fig. 1) comprises overmolding the electronic assembly with a melt processible rubber. Little et al. teach that it is known to overmold an electronic assembly with a melt processible rubber as set forth at column 1, lines 41-43. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made Groenewegen's overmolding the electronic assembly be comprised with a melt processible rubber, as taught by Little et al. in order to avoid shorting. Moreover, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have made Groenewegen's capsule layer comprising of a melt processible

rubber, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Claims 9 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Groenewegen (US 4,694,119) in view of Ducza et al. (US 4,528,932).

Regarding claim 9 (currently amended), Groenewegen discloses an electronic package (10) in accordance with claim 1, except for further comprising a magnetic plate, said magnetic plate positioned beneath said circuit board and encased in said capsule layer. Ducza et al. teach that it is known to provide a magnetic plate as set forth at column 1, lines 6-20. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made Groenewegen's electronic package further comprise a magnetic plate, as taught by Little et al. and positioning the magnetic plate beneath the circuit board in order to provide information as to when the capsule layer moves.

Regarding claim 18 (currently amended), Groenewegen discloses an electronic package (10) in accordance with claim 10, except for said electronic assembly (10) comprising a magnetic plate, said magnetic plate positioned beneath said circuit board and encased in said capsule layer. Ducza et al. teach that it is known to provide a magnetic plate as set forth at column 1, lines 6-20. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made

Groenewegen's electronic package further comprise a magnetic plate, as taught by Little et al. and positioning the magnetic plate beneath the circuit board in order to provide information as to when the capsule layer moves.

Conclusion

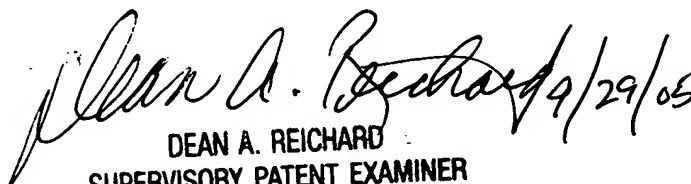
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. King et al. (US 6,872,880 B2) disclose an EMC/EMI shield. Hsu et al. (US 6,783,373 B2) disclose a wireless network apparatus. Schneider et al. (US 6,030,118) disclose a temperature indicator. Groenewegen (US 4,944,401) discloses a crash survivable enclosure. Chesnut et al. (US 4,811,168) disclose a housing and connector apparatus. Johansson et al. (US 4,712,420) disclose a magnetic position indicator. Nakamura (US 4,223,177) discloses a structure for sealing electronic parts. Browne (US 3,909,504) discloses a ruggedized package. Voyles et al. (US 3,806,770) disclose an electrical capacitor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adolfo Nino whose telephone number is (571) 272-1981. The examiner can normally be reached on M-F (7:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean A. Reichard can be reached on (571) 272-2800 ext. 31. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AN


DEAN A. REICHARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800